DSL-252

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: 3D Seismic on State land	Proposed Implementation Date: September 2012
Proponent: St Croix Seismic, P O Box 464, Park City, MT 59044	
Type and Purpose of Action: St Croix Seismic has made application to conduct 3D Seismic Survey on State land in Sheridan County. The seismograph project will be conducted in the fall of 2012. The project is described as the Crazy Horse 2012 3-D under permit number 1587.	
Location: NW4l, Sec. 16 Twp. 34N Rge. 52E, N2NW4, NE4, W2SE4, Sec. 26 Twp. 34N Rge. 52E, NW4, NW4NE4, S2NE4, E2SE4, Sec. 34N Rge. 53E, E2NE4, Sec. 20 Twp. 34N Rge. 53E, NW4, N2SW4, Sec. 21 Twp. 34N Rge. 53E, S2S2, Sec. 36 Twp. 34N Rge. 53E, All, Sec. 36 Twp. 35N Rge. 53E	County: Sheridan

I. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.	Leslie Wright, permit agent for St Croix Seismic contacted the Department of Natural Resources and Conservation, Minerals Management Bureau, Helena Office. The Department of Natural Resources and Conservation, Glasgow Unit Office was contacted to complete the Environmental Assessment process for the seismograph survey. St Croix Seismic has applied for a permit from the Department of Natural Resources and Conservation to conduct a 3D seismograph survey operation on State land. St Croix Seismic has sent maps to the Glasgow Unit Office showing project locations. The Minerals Management Bureau of the Department of Natural Resources and Conservation has contact the State land surface lessees and informed them of the seismograph project
2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	The other agencies that would have jurisdiction for this type of project would be the Montana Board of Oil and Gas, Montana Secretary of States Office, Sheridan County Commissioners.
3. ALTERNATIVES CONSIDERED:	Action Alternative: Grant a seismic permit to the St Croix Seismic to conduct a 3D seismograph survey project on State land. No Action Alternative: Deny a seismic permit to St Croix Seismic to conduct a 3D seismograph survey project on State land.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS
4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compatible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?	Action Alternative: The seismograph project will alter the surface soils on the state land through some compaction. The soil compaction will occur under fall conditions and the impacts should be minimal. The surface soils will retain the same capabilities of producing native rangeland vegetation, tame grass

II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
	vegetation upon completion of activities. The dryland agriculture acreage will continue to produce small grain and dryland hay crops. The Conservation Reserve Program acreage will continue to produce various grass and legume species. No Action Alternative: Under this type of alternative, no impacts would occur on the surface soils.
5. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	Action Alternative: The seismograph project on the various State land tracts will not impact the water quality, quantity and distribution. The stockwater reservoirs or other surface water sites will not be impacted by the seismograph equipment. These areas will be avoided by the seismograph equipment. No Action Alternative: Under this type of alternative, no impacts would occur on water quality, quantity and distribution.
6. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	Action Alternative: The seismograph project on the State land will have minima impacts to the air quality. Some pollutants will become airborne from various types of seismograph equipment. Some of the airborne pollutants may be vehicle and equipment exhaust, along with dirt particles airborne from equipment movement on various surface soils. No Action Alternative: Under this type of alternative there would be no impacts to air quality.
7. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?	Action Alternative: The native vegetation on the project area will become compacted from heavy equipment during dry fall conditions. The impacts should be minimal and the area will continue to produce native vegetation. The native vegetation will see at least one year of lower plant production, but the following year plant production should return to normal The dryland agriculture acreage will continue to produce small grain vegetation upon project completion. There may be one year that tracks left from this activity will not produce optimum small grain or pulse crops. If the area is worked with farming equipment the year after impacts, the area should produce normal crops the third year. The conservation reserve program acreage will continue to produce grass and legume vegetation. The grass and legume production will probably be lower the year after project completion. No Action Alternative: Under this alternative there would be no impacts to native vegetation or small grain crops.
8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	Action Alternative: The state land contains habitat types for wildlife and upland birds. The project will be short term and there will be minimal impacts to the habitat types. The Montana Natural Heritage Program list the following species of concern for the tracts of land listed under this project: Bairds Sparrow, Spragues Pipit, Long-billed curlew, LeContes Sparrow, Northern Redbelly Dace, and Peral Date. The seismic equipment impacts will occur in the fall. This time frame will not affect mating or nesting for the listed bird species. No Action Alternative: Under this alternative there would be no impacts to the habitat types.
9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern?	Action Alternative: The area of impact contains no known unique, endangered, fragile or limited environmental resources. There may be some prairie pothole areas on some of the listed tracts. The prairie potholes will be avoided if possible by the seismic equipment.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
	No Action Alternative: Under this alternative there would be no impacts to the State land environmental resources.
10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	Action Alternative: The state land contains stone circles and rock cairns located on the W2ME4. NW4, Sec. 36 Twp. 35N Rge. 53E, NW4, W2NE4, Sec. 16 Twp. 34N Rge. 53E The stone circles and rock cairns will receive minimal impacts from seismic equipment crossing these sites. No Action Alternative: Under this alternative no project would occur on the State land.
11. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	Action Alternative: This type of project on State land will not impact the aesthetics of the state land. The seismic operation will be visible to the general public that uses the county roads that boarders the various tracts listed in this document. No Action Alternative: Under this alternative there would be no impacts on the State land.
12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?	Action Alternative: This type of project on State land will place no demands on the environmental resources of land, water, air or energy. The project will not impact other activities that are occurring in the area near the project sites. No Action Alternative: Under this alternative there would be no demands on environmental resources of land, water, air or energy.
13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?	Action Alternative: This type of project on State land will not impact other studies, plans or projects that the Department of Natural Resources and Conservation may have in place on the State land. Other land owners near the State land will be contacted by the seismic company. The seismic company will compensate the landowner for surface damages on the deeded land surface. No Action Alternative: This alternative would have no impacts to other environmental documents pertinent to the State land.

III. IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	Action Alternative: This type of project on State land has minimal human health and safety risks. The risks are understood by the employer and employee as occupational hazards. The human health and safety will be minimal with the use of highly trained personnel that work for the seismograph industry. No Action Alternative: This type of alternative will have no impacts to human health and safety.
15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	Action Alternative: The project will have minimal impacts to the current dryland agriculture activities or livestock grazing that may be occurring on the State land. The surface lessees will have fences repaired by the seismograph company after project has crossed fence lines. No Action Alternative: Under this type of alternative there would be no impacts to agriculture activities on the State land.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	Action Alternative: The project will have no impacts on the quality and quantity and distribution of employment. There will be minimal employment opportunity for local people to work for the seismic company without previous experience. No Action Alternative: Under this alternative there would be no impacts to quantity and distribution of employment.
17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	Action Alternative: The project will have no impacts on the local and state tax base and tax revenues. No Action Alternative: Under this type of alternative there will be no impacts to the local and state tax base and tax revenues.
18. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	Action Alternative: The project will place no demands for government services. No Action Alternative: Under this alternative there will be no impacts for the demand for government services.
19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	Action Alternative: The project will not impact locally adopted environmental plans and goals. Before project begins the seismograph company will have acquired all of the necessary permits from local and state government. No Action Alternative: Under this alternative there would be no impacts on locally adopted environmental plans and goals.
20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	Action Alternative: The area of impact has recreational values such as hunting antelope, whitetail deer and upland birds. The project is short term and there will be no impacts to the recreational values associated with the State land tracts. No Action Alternative: Under this type of alternative there would be no impacts to the recreational values associated with the State land.
21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	Action Alternative: The project will not impact the density and distribution of population and housing. The seismograph company will house employees in local motels and hotels for the project duration. No Action Alternative: Under this alternative there would be no impacts to density and distribution of population and housing.
22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	Action Alternative: The project will not disrupt the traditional lifestyles of the local community. The local communities will see a positive impact to the local economy from the project. No Action Alternative: Under this alternative there would be no disruption of native or traditional lifestyles of the local communities.
23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	Action Alternative: The project will not impact the cultural uniqueness and diversity of the area. No action Alternative; Under this alternative there would be no impacts to the cultural uniqueness and diversity of the area.
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	Action Alternative: The project may provide benefits to the local community through supplying petroleum, food products, lodging, etc., as well as other products to the seismograph company. No Action Alternative: Under this alternative there would be no impacts to the social and economic

	circumstance of the local communities.

EA Checklist Prepared By: /S/ Date:
Randy Dirkson Land Use Specialist

IV. FINDING	
25. ALTERNATIVE SELECTED:	Action Alternative: Grant St Croix Seismic a permit to conduct 3D seismograph survey project on State land. The seismograph project will enhance the School Trust program from the monies received from the seismograph company for a seismic permit.
26. SIGNIFICANCE OF POTENTIAL IMPACTS:	The seismograph project will have minimal impacts to the state land natural resources.
27. Need for Further Environmental Analysis: [ ] EIS [ ] More Detailed EA [X] No Further Analysis	

EA Checklist Approved By: R. Hoyt Richards, Glasgow Unit Manager
Name Title

/s/ November 2, 2012 Date:
Signature